

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 September 2005 (29.09.2005)

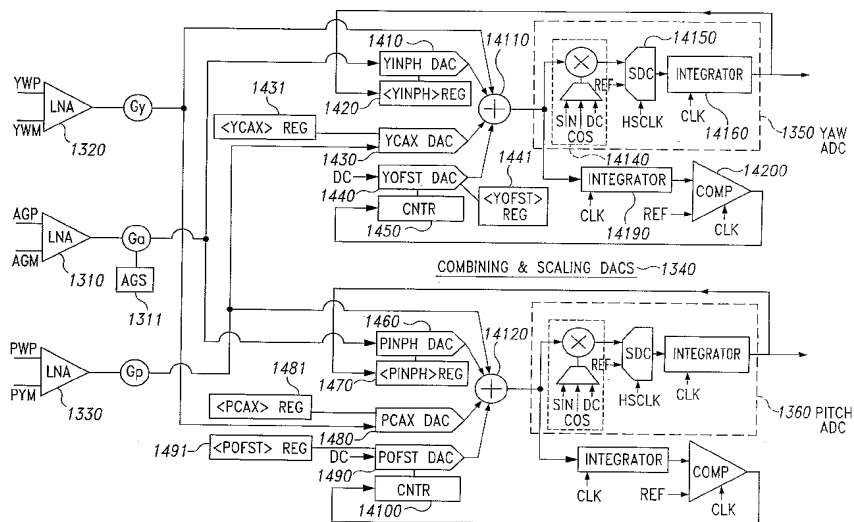
PCT

(10) International Publication Number
WO 2005/090915 A1

- (51) International Patent Classification⁷: **G01C 19/56** (74) Agents: **TRIPOLI, Joseph, S.** et al.; Two Independence Way, Suite #200, Princeton, NJ 08540 (US).
- (21) International Application Number: PCT/US2005/008372 (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 11 March 2005 (11.03.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/552,652 12 March 2004 (12.03.2004) US
- (71) Applicant (for all designated States except US): **GYRATION, INC.** [US/US]; Building C, 12950 Saratoga Avenue, Saratoga, CA 95070 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **HOTELLING, Steven, Porter** [US/US]; 1351 Hidden Mine Road, San Jose, CA 95120 (US). **BAYER, Lex** [ZA/US]; 691 Roble Avenue, #4, Menlo Park, CA 94306 (US). **LAND, Brian, R.** [US/US]; 2726 Sussex Way, Redwood City, CA 94061 (US).
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: ERROR CORRECTION FOR VIBRATORY RATE GYROSCOPE



(57) Abstract: A synchronous signal processing circuit for a dual-axis vibratory rotation-rate sensor uses a hybrid analog/digital design to provide correction for parasitic quadrature errors by the addition of synthesized correction signals in the analog domain prior to digitization. Error correction, signal demodulation and data conversions are synchronized with a signal phase-locked to the measured motion of the vibratory mass. Similarly, cross-axis error correction signals are synthesized directly from the cross axis signals. Use of these precise phase references provides for various benefits in signal noise and error matching (tracking) over wide operation conditions.

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